# Integrated Water Resource Management Planning

from the Massachusetts Water Policy, which recommended a guide for Towns to "evaluate a wide range of issues including, drinking water, ground water recharge and stream flow"

# Encourages communities to "consider a wider range of strategies for managing water resources"

- wastewater reuse
- conservation
- optimization of existing drinking water sources
- ground water recharge of stormwater and wastewater
- implementation of low impact development techniques
- sustainable development principles

# Issues addressed in an IWRMP should reflect concerns of the community for which it's written

- densely populated urban areas served by water and sewer: focus on age capacity and condition of the existing infrastructure
- densely populated areas with space constraints: LID for managing stormwater in cities such as green roofs, permeable pavement, rain gardens and sidewalk design
- rural and suburban areas: decentralized wastewater and stormwater systems that keep water local and enhance the overall water balance
- when it's difficult to solve problem inside a Town boundary: also consider regional solutions
- in coastal areas: consider impacts on coastal wetlands and their ability to prevent storm damage and control flooding and effect of growth in hazard prone areas

## Scope of Work is critical; framework includes 3 levels of plans

#### **IWRMP**

- addresses community's current and future wastewater, drinking water and stormwater needs together
- identifies most economical and environmentally appropriate means to address needs
- can examine overall ability of the water resource infrastructure to accommodate anticipated growth as reflected in the community's plans
- incorporates other plans, such as infiltration and inflow control plans, long term CSO plans, TMDLs, NPDES permits, including EPA's proposed MS4 program
- virtue: IWRMP a "one document/one process" to foster cooperation across municipal departments
  - This summary is offered for discussion purposes only and does not necessarily represent current statute, regulation, or policy positions of the Commonwealth of Massachusetts unless specifically acknowledged. This summary is not to be cited as a reference. Its purpose is to foster open and broad discussion of the issues of sustainable water management as well as help assure public awareness of the discussions as of the date of the meeting.

## Comprehensive Water Resource Management Plans: to address problems in one area

- Comprehensive Wastewater Management Plan to consider decentralized alternatives to sewering, such as wastewater reuse, package treatment plants, and on-site septic systems
- Comprehensive Water Supply Plan: concentrates on current and future water supply needs
- Can also do a Comprehensive planning for Stormwater: improve stormwater management and help meet local, state and/or federal stormwater permitting requirements

# **Engineering Reports**

- focus on the need for a particular infrastructure or mitigation project
- example: specific stormwater projects to increase recharge and mitigate water quantity impacts of an increased water withdrawal; expansion of a sewer system recommended in an earlier Comprehensive or Integrated Plan

These plans - IWRMP; Comprehensive Plans; Engineering Reports - should be used in MEPA and SRF processes

Setting appropriate scope for MEPA and for SRF is critical

## Other policy principles for the scope of Integrated and Comprehensive Plans:

- fix-it first
- Greenhouse Gas Emission Policy
- Assess man-made and natural environment
- Describe man-made environment
- Describe natural environment
- Describe anticipated growth
- Develop and Screen alternatives
- Compare and rank alternatives
- Develop recommended plans

http://www.mass.gov/dep/water/laws/iwrmp.pdf